



The HANFORD

January 11, 1999

REACH

A publication of the U.S. Department of Energy's Richland Operations Office for all site employees

INSIDE

COMMUNITY



Mentoring JA
students **4**

PROJECTS



Seeking comments
on groundwater
plan **5**



From left, Mike Thurman and Mike Sams of Waste Management Northwest review shipping records for the 315 Building chlorine cylinders with Saul Martinez of DynCorp's environmen-

tal services. The removal is part of a plan to improve site-wide water service and remove industrial hazards from Hanford's 300 Area.

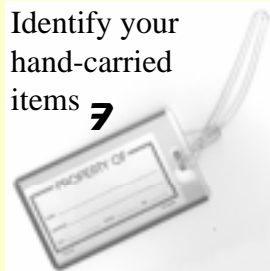
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Protecting
Hanford's bats **6**

SECURITY

Identify your
hand-carried
items **7**



FEATURES

- 2** Letters
- 2** Newsbriefs
- 2** Calendar
- 8** Bravo
- 8** Activities
- 8** Vanpools

Chlorine tanks removed, 315 Facility deactivated

Michele Gerber, FDH

Hanford's Infrastructure project successfully removed two one-ton chlorine cylinders from the 315 Water Filter Plant on Dec. 28, signifying a major step in deactivating the nearly 40-year-old facility and reducing industrial hazards in the 300 Area. The removal effort is part of a larger plan that will streamline and improve water service across the site during the next few years.

The gas cylinders had served for many decades as part of a system that provided water to the 300 Area. Now, all 300 Area water — except for small quantities supplied to fish tanks in the 331 Life Sciences Building — will be provided by the City of Richland.

City water will be distributed throughout the area by new downsized pumps in the 382 Facility. A small operator's office with a portable heating system will be maintained in the 315 Water Plant until a remote monitoring capability is installed in the 382 Facility later this year. However, main power supplies to the 315 facility will be shut off and water lines will be drained and either cut or capped.

Deactivation of the old plant, originally built to supply reservoir and secondary cooling

water to the experimental Plutonium Recycle Test Reactor in 1960, is expected to save

more than \$50,000 a year in electrical

See **Chlorine**, page 6

DOE, contractors on a roll with contaminated tumbleweed issue

The Russian thistle, or tumbleweed, that breaks loose in the wind and comes to rest on your back fence is little more than a minor nuisance. On the Hanford Site, however, tumblin' tumbleweeds are more

of a problem because some can spread low-level radioactive contamination.

Heightened attention to the issue of contaminated tumbleweeds was recently initiated by individual employees

through the Employee Concerns programs of Fluor Daniel Hanford and the DOE Richland Operations Office.

See **Tumbleweeds**, page 7

Hanford Reach now on Internet

Now readers can see the *Hanford Reach* on-line and in living color. Hanford's site-wide employee newspaper is available on the World Wide Web.

Making the publication available on the Internet has been a goal of the Communications and Media Relations staff at Fluor Daniel Hanford, which produces the weekly newspaper for the U.S. Department of Energy's Richland Operations Office.

The *Hanford Reach* Web site may be accessed directly at <http://www.hanford.gov/reach/index.html>. The on-line

Reach also can be accessed via the Hanford external Web site at <http://www.hanford.gov>. Select "Get to Know Hanford," and then "Hanford Reach News Publication." Site employees can access the internal Web site at <http://www.rl.gov:1050/>. Employees can then either select "Employee Information," and "Hanford Reach News Publication," or go directly to the "Hanford Internet Home Page."

The *Hanford Reach* is saved to the Web site as a ".pdf" file. To view pdf files, Adobe Acrobat Reader must be installed on the computer. Acrobat Reader may

be installed at no charge by going to <http://www.adobe.com/prodindex/acrobat/readstep.html>.

Hanford employees may install Acrobat Reader via the HLAN folder by opening "Software Distribution," selecting "Internet Tools," then selecting "Adobe Acrobat Reader."

Site employees who have difficulty opening the Hanford external Web page or the *Hanford Reach* pdf files should contact Hanford's Customer Technical Support (CTS) at 376-1234.



LETTERS

Employees are invited to write letters of general interest on work-related topics. Anonymous letters will not be printed. We reserve the right to edit letters or not to accept letters for publication. Send your letters to the *Reach*, B3-30, or the *Hanford Reach on e-mail. Letters are limited to 300 words, and must include your name, company, work group and location. Opinions expressed are those of the author and not of DOE-RL or its contractors.

A sad prediction

We have a problem on the Hanford Site. I'm talking about an increase in unsafe behavior and "roadway lawlessness" on Hanford Site roads. This tendency toward lawlessness on our roads leads me to make a sad prediction that unless something changes soon, Hanford will have a traffic fatality or severe injury within the year.

Because of little accountability and no fear of penalty, even normally law-abiding individuals feel a freedom to exceed posted limits, caution signs and warnings, without considering the possible consequences. This tendency can be illustrated easily. Someone passes you doing 15 miles over the posted limit. You say, "If they are going 15 over the limit, I am safe to do 10 over." Or you become competitive and determine "That guy isn't going to out-do me," or "They passed, why can't I." The challenge is accepted, thereby creating two drivers driving unsafely.

I see three potential solutions to this problem:

1. Do nothing.
2. Increase law enforcement on site roads. This will increase awareness. When motorists are ticketed, this puts back the fear of accountability in all of us.
3. Finally, how about deputizing a couple hundred Hanford workers to be "Roadway Observers." They could observe site drivers to ensure accountability of traffic rules and regulations. These observers, whether recognized or voluntary, could recognize unsafe behaviors and report them to the proper authorities. I don't suggest that a single action is worthy of punishment, but how about 20? If 20 people notice a driver performing an unsafe act, it could be considered a consistent disregard for traffic laws. Now, shouldn't *that* be reported?

If nothing is done, the increase in lawlessness on the roads will continue and could ultimately lead to my prediction coming true. Perhaps there are other solutions to this problem, but if nothing changes, someone will lose sooner rather than later.

Charles Skogley
Waste Management Hanford

Wires were crossed

The picture of the radiological control technicians ("200 Area contamination spread contained," *Reach* Year in Review, Jan. 4), while it may be cute, shows improper procedure. If you look

at the cables of the GM/P11 probe attached to the walking sticks used by the two technicians on the left, you will notice that the cables are attached to the other RCT's instrument.

I noticed this in the last picture you printed of these individuals, but did not want to make a big thing of it. This is a different picture, but the same improprieties are present. This is improper procedure. Please pay closer attention to details such as this in the future, for this type of prank is demeaning to the site's image.

Floyd Frankenfield
Waste Management Hanford

Editors' note: It appears we were all duped, and we couldn't get a good answer as to why. Frankenfield is correct that this procedure is inappropriate — apparently done as a prank for the

photographer. According to Bernie Lueck of B&W Hanford, the cables were not crossed during the surveys, and each technician used his or her own instrument properly.

A big difference

It appears that the decimal point was misplaced in the *Hanford Reach* article on FDH's safety accomplishments ("FDH employees achieve three million safe work hours," Jan. 4). I believe it would take only 3.4, not 34, years for 100 people working 24 hours per day to reach 3 million work hours.

I hope the people that calculated/reported the 34-year value aren't the same ones taking care of our 401k investments!

Tom Burke
B&W Hanford

The HANFORD

REACH



The *Hanford Reach* is published weekly for employees of the U.S. Department of Energy's Richland Operations Office and its Hanford contractors.

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Employee articles and suggestions should go to company contacts.

Deadline is 10 a.m. Thursday, 10 days prior to Monday publication. All articles are subject to editing. Contact the editors by phone, fax, site mail or e-mail.



CALENDAR

ANS meeting features nuclear medicine experts

The Eastern Washington Section of the American Nuclear Society is having a dinner meeting on Jan. 19 at the Tower Inn, Richland. The topic will be "Amazing Cancer Therapies: Eyewitness Accounts of Future Potentials with Medical Isotopes." Dr. Huibert Vriesendorp, an expert in nuclear medicine at the Arlington (Texas) Cancer Center, and Sue Spenceley, medical professional and surviving Hodgkin's disease patient from Laguna Hills, Calif., will share their personal successes and experiences in this new and promising field. Social hour starts at 5:30 p.m., dinner at 6:30, and the featured speakers at 7:30. RSVP via phone or e-mail to Shiv Seth, 376-8129, or Steve Gedeon, 376-9892, before 4 p.m. on Monday, Jan. 18. Dinner choices are sliced pot roast, baked cod creolaise, or vegetarian pasta primavera. The cost for dinner is \$12/members and \$15/non-members.

Hanford NMA sponsors training courses

The Hanford National Management Association chapter is pleased to sponsor the following courses:

Interpersonal Relationship Skills — Feb. 23-24. Increase your effectiveness in interpersonal relations. Cost: \$100. CEU: 1.4. Deadline: Feb. 9. To register, contact Carrie Locke, 376-1111.

Certified Manager Study Group — Feb. 1-May 17 (every Monday except Feb. 15), 5-6:30 p.m., Richland Public Library. This weekly study group is designed to help people get ready to take the ICPM Certified Managers (CM) exam scheduled for Saturday, May 22. Certification is achieved upon approval of the CM application, and successfully passing a three-part examination (personal, administrative, and interpersonal). For information and to register, contact Ed Schwier, 372-0176, or Carrie Locke, 376-1111.

Professional Development Through Community Involvement — Feb. 2-May 25 (every Tuesday for 16 weeks), noon-1 p.m. Federal Building Auditorium, Richland. Each week features a different community organization representative who will present what the organization does and how you can become involved. (Examples: Junior Achievement, Hugh O'Brien Youth Foundation, Special Olympics.) Cost: Free. Deadline: N/A. CEU: 1.6 for full-course attendees; however, anyone can attend any number of the sessions. To register, contact Terry Winward, 376-4002. Note: course can be used as recertification for Certified Managers.

January 11, 1999

HANFORD REACH

Page 2b

Leadership Development — TBD in April, Hanford Training Center. Course will cover the problems, concepts, and techniques of leading others. CEU: 1.4. Cost: \$100. Deadline: TBD. For information and to register, contact Carrie Locke, 376-1111. ♦



NEWSBRIEFS

Hanford Technical Library expands standards collection

The Hanford Technical Library greatly expanded its collection of industry and society standards. Many of these new additions came from the Fluor Daniel Northwest Library collection. The expanded collection includes standards from the American National Standards Institute, the American Nuclear Society, the American Society of Mechanical Engineers, the Institute of Electrical and Electronics Engineers, and the American Welding Society.

Standards are listed in the online Hanford Technical Library Catalog. Some standards in the reference collection must be used in the library, but most are available for checkout by Hanford personnel. Circulation requests may be made through the online catalog or by contacting the Hanford Technical Library.

Additional information about the standards collection as well as links to useful standards Internet resources is included on the Hanford Technical Library's Web page at <http://htlweb.pnl.gov/subject/standard.htm>. The library also provides an electronic edition of the National Fire Protection Association's *National Fire Codes* via the HLAN.

Hanford Technical Library staff also can help Hanford employees locate and purchase office copies of standards. For assistance with standards or for instructions on installing the online catalog, call the Hanford Technical Library's Reference Desk at 372-7430.

The Hanford Technical Library is operated by Pacific Northwest National Laboratory as a site service. The standards collection is in the main library located in the Consolidated Information Center on the Washington State University Tri-Cities campus. A legal library branch is on the fourth floor of the Federal Building. ♦

PNNL receives 'outstanding' performance rating

The Department of Energy's Richland Operations Office has awarded Battelle a rating of "outstanding" for its performance during Fiscal Year 1998 in operating the Pacific Northwest National Laboratory. PNNL receives \$5.6 million in fixed fee for the one-year period.

This was the third year under a new system of tracking PNNL performance. Six "Critical Outcomes" were developed by DOE and the contractor, and overall performance within those six outcomes was found to be excellent.

In his letter transmitting the performance appraisal to Battelle Dec. 21, now-retired Hanford Manager John Wagoner indicated that, in consideration of Battelle's ongoing outstanding efforts to strengthen the partnership with DOE and its extraordinary effort in other key areas, DOE was raising the overall rating to outstanding. "Battelle's scientific research performance was outstanding in FY 1998 as noted by the Headquarters Office of Science rating for scientific excellence," Wagoner wrote.

Wagoner also pointed out that the extraordinary inaugural year of the Environmental Molecular Sciences Laboratory was a primary example of the company's performance. And PNNL's exceptional progress in the development and implementation of the Integrated Safety Management System — to include the successful verification of the system, the first for a DOE laboratory — contributed to the higher rating. PNNL's performance in the six "Critical Outcomes" featured the following highlights:

- **Environmental Technology** — PNNL demonstrated 14 new technologies for a variety of cus-

tomers at numerous sites, and successfully deployed 13 technologies that affect environmental cleanup. Twenty-five activities or solutions addressing Hanford science needs and technical gaps were provided. Performance in this area was outstanding.

- **Scientific Excellence** — Performance in delivering more and better research and development for each dollar spent and PNNL's reputation as a science and technology provider of choice in the markets it serves was rated as excellent. Notable achievements for FY 1998 include being awarded 10 R&D 100 and Federal Laboratory Consortium awards, and receiving outstanding peer reviews and excellent customer feedback from the scientific community.

- **Scientific and Technical Contributions** — PNNL contributed to national security by providing detection technology in support of the Comprehensive Test Ban Treaty and the disposition of irradiated nuclear fuel in the Democratic Republic of Korea. Performance was excellent.

- **Operational Excellence** — This outcome was rated as excellent. DOE was very pleased with the review and validation of PNNL's Integrated Safety Management System and Battelle's commitment to radiological control and occupational safety and health. Battelle also made significant progress toward integrating safety and environmental management practices into daily operations.

- **Leadership and Management** — Battelle continued excellent work in gathering valuable insights

into staff and management needs and maintained emphasis on using self-assessment to monitor and drive needed improvements. The Integrated Assessment Program, now in its third year, continues to improve as the program matures.

- **Community Relations** — Performance in this area continued to be outstanding. PNNL was instrumental in the formation of 12 new technology-based businesses. Ten of those businesses that started in FY 1997 were still operating as of the end of FY 1998. Battelle also continued its strong partnerships with local and regional organizations to enhance science, mathematics and technology reform efforts in schools.

In August, DOE reached agreement on a five-year contract extension for Battelle to operate PNNL. The contract is in effect through September 2002. ♦

Yucca Mountain document completed

In December, Secretary of Energy Bill Richardson submitted the Viability Assessment of the Yucca Mountain, Nev., site to the President and the Congress. Yucca Mountain is being studied as a potential geologic repository for the disposition of the nation's spent nuclear fuel and high-level radioactive waste.

The purpose of the Viability Assessment was to provide the President, the Congress and the public with information on the progress of analysis at the Yucca Mountain site. The Viability Assessment also identifies the critical issues that need additional study before a decision can be made by the Secretary of Energy in 2001 on whether to recommend the site for development as a repository. These issues include the key natural processes in Yucca Mountain such as water movement, as well as the long-term performance of the repository and waste package designs.

"The Viability Assessment reveals that no show stoppers have been identified to date at Yucca Mountain," said Secretary Richardson, "and that scientific and technical work should proceed to support a decision in 2001 whether to recommend the site to the President for development as a geologic repository. Before the site can be recommended, DOE will need to demonstrate that a repository can be designed and built at Yucca Mountain that would protect the health and safety of the public and the environment for thousands of years."

To address remaining uncertainties, DOE plans to improve the preliminary design, complete critical tests and analyses and issue draft and final environmental impact statements. ♦



98120192-5

THREE-YEAR EXTENSION: Waste Management Federal Services of Hanford has a new three-year contract extension with Fluor Daniel Hanford as a member of the Project Hanford Management Contract team. On hand for the contract signing were (seated, left to right) Ed Aromi, president and general manager of WMH and Ron Hanson, president and chief executive officer of FDH. Standing, left to right, are Dave Van Leuven, executive vice president and chief operating officer of FDH; Ron Peterson, president of the Government, Environmental and Telecommunications Group of Fluor Daniel, Inc.; Dick Wilde, vice president and deputy general manager of WMH; and Dick Hansen, contracting officer of FDH. The contract runs through September 2001.

Junior Achievement: Volunteering makes a difference

Calvin Dudney, FDH

The Project Hanford Management Contract companies continue their strong support for area schools through the PHMC-Junior Achievement partnership. Many PHMC employees are serving as Junior Achievement classroom volunteers, which is approved under the Department of Energy's "volunteerism" policy.

Junior Achievement is the largest, fastest-growing school-business partnership organization in the world. Its mission is to inspire young people to value their education, learn about the world of work and be prepared to succeed. Anyone can help by volunteering and becoming role models and mentors to students with your diverse outside perspectives.

Volunteering is easy. Volunteers are provided training, teaching plans and materials for your use in the classrooms by Junior Achievement. You then facilitate hour-long activity-oriented lessons for students in second through 12th grades. The program design is based on five visits at the elementary level, eight visits at the middle-school level or 10 visits at the high-school level. Upon completion, *you will be a junior achievement hero!*

Junior Achievement and the kids who participate are not the only winners. This opportunity offers you ways to improve your presentation style, leadership and time-management skills. As a volunteer, you will be able to stretch the limits of your cre-

"I'm not sure who's the real winner in this program — is it the student or myself?"

Amy Basche
Lockheed Martin Hanford



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John Umbarger, director of Community Programs for Fluor Daniel Hanford, mentors students at Captain Gray School in Pasco as part of the Junior Achievement program.

ativity, feel motivated by a young audience eager to learn real-life scenarios, and receive satisfaction from watching students increase their knowledge through your own professional experiences.

You'll also be able to add a well-respected form of community volunteerism to your résumé, receive personal recognition and even earn Washington

Continued on 4b

State University credits for teaching.

“The Junior Achievement program is real-time,” said Gordon Beecher, FDH director of Human Resources. “It offers students an opportunity to hear from professionals what they need to prepare for today’s workforce.”

In the 10 years Junior Achievement has been in operation in the Tri-Cities, more than 18,000 young people have participated in the program. During the 1998-99 school year, more than 4,500 students in Pasco, Kennewick, Richland, Burbank, Benton City and Finley schools will receive the benefit of our time and talents.

“I’m not sure who’s the real winner in this program,” said Amy Basche of Lockheed Martin Hanford. “Is it the student or myself? The energy you walk away with after being with those ‘knowledge sponges’ is refreshing.”

For more information, employees of DE&S Hanford should contact Eileen Behan at 372-8292. All other PHMC employees may call Junior Achievement at 783-7222 or Theresa Quezada of FDH Community Programs at 373-0513. Employees of enterprise companies should contact their Human Resources manager. ♦



98120034-10CN

YEAR 2000 TESTING COMPLETED FOR HANDI 2000: Bill Harrison, left, of Lockheed Martin Services, Bo Woronowicz of Memco, and Larry Armstrong of Lockheed Martin Services Inc. provided support expertise during the successful Year 2000 testing of the HANDI 2000 program. Data using a series of dates were entered and the program’s clock was rolled forward to verify that the system functioned properly into the year 2000. The testing took about two weeks at the LMSI test laboratory.

PNNL partners with Russia in 'nuclear cities'

Jodi Hamm, PNNL

For decades during the Cold War, the Soviet Union and the United States competed for nuclear superiority. Now Russia and the U.S. are co-operating to bring about peaceful enterprises in what are known as "closed" cities.

In September 1998, U.S. Energy Secretary Bill Richardson and Russian Minister of Atomic Energy Yevgeny Adamov signed the Nuclear Cities Initiative and launched a major economic diversification effort in Russia's 10 closed "nuclear cities." These 10 nuclear cities were among the most secret facilities in the former Soviet Union. Behind their guarded fences, thousands of scientists and engineers worked on the design, assembly and production of the Soviet nuclear arsenal.

The goal of the initiative is to enable the Russian government to

"right-size" the weapons complex for post-Cold-War realities by creating viable businesses in the nuclear cities to absorb former weapons workers. Neither Russia nor the U.S. want skilled workers who know how to fabricate nuclear devices to leave for countries with possible proliferation aspirations — countries such as North Korea, Iraq and Libya.

Congress approved \$20 million for the Nuclear Cities Initiative for fiscal year 1999. The Pacific Northwest National Laboratory hopes to play a major role in carrying out the goals of the initiative and has been a leader among the Department of Energy's national laboratories in getting the initiative up and running.

Efforts will focus on commercial enterprises that will create jobs in the nuclear cities. The U.S. will lend its private-enterprise expertise to the cities and look for matches between private-sector companies and Russian

facilities for manufacturing, marketing and sales of commercial goods.

"PNNL already has facilitated workshops involving delegates from three of the 10 Russian closed cities — Sarov, Snezhinsk, and Zheleznogorsk," said Ken Ames, who manages the initiative at PNNL. "The Laboratory has involved such local community resources as the Tri-City Economic Development Council, the Tri-Cities Enterprise Center and Washington State University in these workshops."

Many PNNL staff members and others from the community have visited Sarov and Snezhinsk. In both cities, there is an enthusiastic interest in the program and an eagerness to become successful players in the market economy.

The initiative draws on the experience of the U.S. in restructuring former nuclear weapons laboratories and production complexes, including

Hanford and Oak Ridge. The United States' technical assistance to the nuclear cities includes training in business planning and outreach activities to attract businesses to the area as well as incubators and training and support services to get new businesses off the ground.

"Creating economic diversification in a nuclear city is something that citizens of the Tri-Cities have been doing longer than anyone else," said Ames. "In fact, PNNL was created almost 35 years ago to focus the Hanford Site's intellectual capital to non-weapons missions such as environmental restoration."

PNNL has extensive involvement in DOE programs in the former Soviet Union, including weapons material safeguards, nuclear power plant safety, proliferation prevention, and environmental monitoring and cleanup. ♦

Williams to head Waste Management Project

Janice Williams has been appointed Fluor Daniel Hanford project director for Waste Management. The announcement was made by Dave Van Leuven, FDH executive vice president and chief operating officer.

Williams succeeds Gus Mattsson, who has successfully led the Waste

Management Project for FDH since 1996. Williams assumed the project direction responsibilities Jan. 5, reporting to Van Leuven. Mattsson will continue to report to Van Leuven and focus on key initiatives related to Fluor Daniel Hanford project direction.

Williams, who was previously the

FDH deputy director of the project team for Groundwater and Vadose Zone Integration, has 20 years of experience in project management, engineering, operations and environmental and regulatory compliance. She has held a series of progressively more responsible positions at Hanford

since 1989, including key project management posts in the Spent Nuclear Fuel, Waste Management and Tank Waste Remediation System projects.

Williams holds a bachelor's degree in geological engineering from the Colorado School of Mines. ♦

Comments sought on groundwater planning

The public has the opportunity to comment on the Department of Energy's plans to ensure that future cleanup actions at the Hanford Site will protect water resources, including the Columbia River. Those plans are contained in the just-released Groundwater/Vadose Zone Integration Project Specification, now available for public review. Developed with input from the public and tribal nations, the specification document describes plans for integrating individual Hanford projects and provides a science and technology roadmap to support decisions to clean up Hanford.

Hanford's Groundwater/Vadose Zone Integration Project developed the three-part draft plan, which includes a project specification, a cost and schedule baseline and a long-range plan. The project was established a year ago in response to DOE's announcement that past leaks from Hanford's single-shell tanks had contaminated the soil between the surface and groundwater (called the vadose zone) and were now affecting groundwater that's moving toward the Columbia River.

"Although our Hanford projects are

individually focused on protecting the Columbia River, it's clear that we need to take a sitewide approach to our cleanup," said Linda Bauer, DOE Richland's assistant manager for Environmental Restoration. "This integration effort will assure that our impact assessments, our cleanup actions and our use of science and technology are being applied in the best possible way to protect our water resources."

The draft plan outlines the project's five objectives and proposed approaches for achieving them, including:

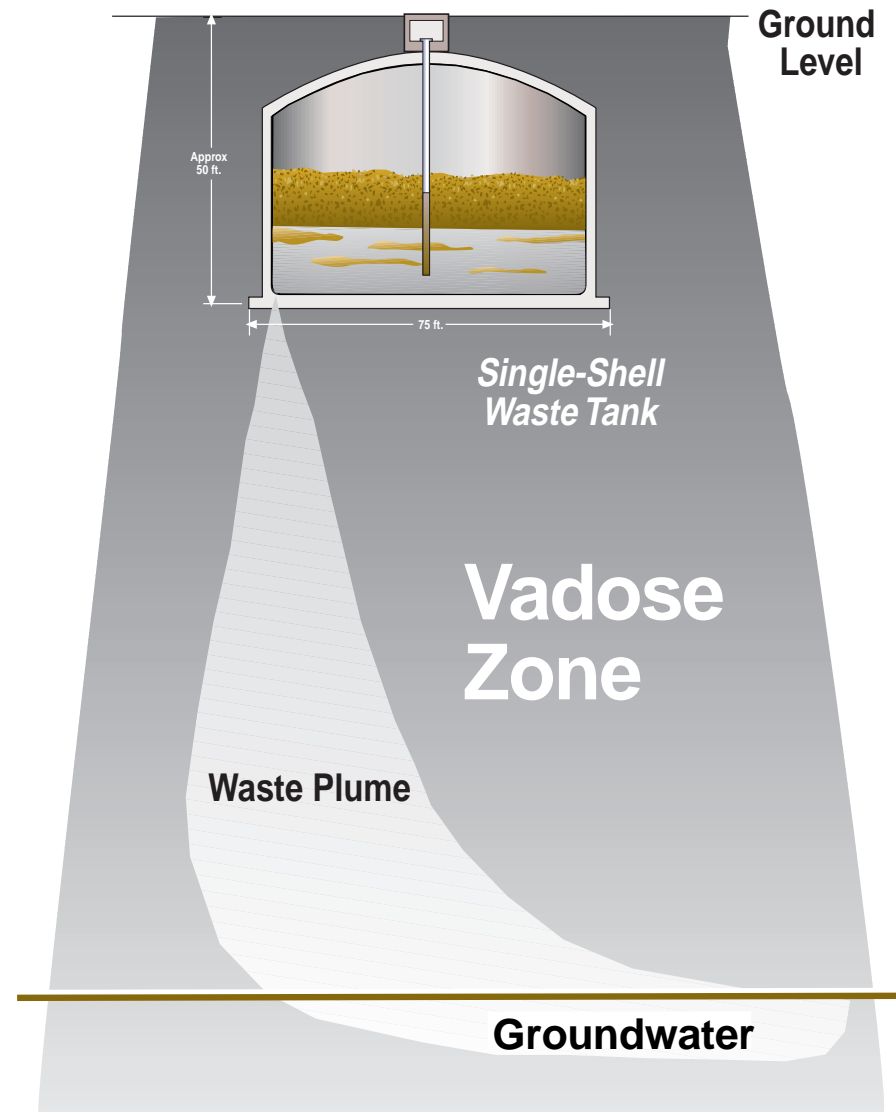
- Integrating all Groundwater/Vadose Zone-related workscope
- Predicting current and future impacts resulting from contaminants released to the soil and groundwater
- Providing a sound science and technology basis for cleanup decisions and actions
- Fully involving the tribal nations, regulators and stakeholders so that the project accurately reflects their interests and values
- Establishing an independent technical peer review process.

The public comment period for the document is open through March 12. Copies of the plan are being placed in the public reading rooms and will be available on the Internet at <http://www.bhi-erc.com/vadose/pubrev.htm>. A copy also may be obtained by calling Karen Strickland

at 372-9236 or by sending an e-mail message to webmaster@bhi-erc.com.

Workshops to discuss the document will be held in the Tri-Cities, Seattle,

Portland and Hood River. Specific dates, locations and times will be announced. ▼



Hanford bats get new gate to haven at DR Reactor

When members of a Small Footed Myotis bat colony return to Hanford this spring, they may not recognize a new entrance to their old home.

That's because a new "bat gate" has been installed over the entrance to their Hanford home, a non-contaminated tunnel once used to send cooling water into Hanford's DR Reactor. The new entrance gives the bat colony one of the Tri-Cities' most exclusive entrances — but, more importantly, preserves the bats' habitat where they have roosted for many years.

With Interim Safe Storage work completed at C Reactor, the Bechtel Hanford-led Environmental Restoration Contract team is now working at DR and F Reactors. The work includes removing all ancillary structures and sealing up holes in the reactor building where bats are entering the tunnel. Eventually, under a separate project, the tunnels may be removed at an estimated cost approaching \$100,000. For now, the tunnels will be preserved as a habitat for bats.

Ken Gano, a senior scientist on the ERC team, helped arrange for the bats' new entrance. "The gate is an inexpensive investment that protects the bats' habitat," Gano said. "And, by protecting their habitat, it may mean reduced future cleanup costs."

The bats' lair initially was discovered in 1993 by researchers with Pacific Northwest National Laboratory, before



98120100-18

Workers with Sun River Electric maneuver the 8-foot-tall bat gate into position over a tunnel once used to send non-contaminated cooling water into Hanford's DR Reactor. Bats use the tunnel as a maternity roost. The bats have entered the tunnel through an opening that will be sealed as part of the interim safe storage work now taking place at the reactor.

the ERC team began "cocooning" Hanford's former production reactors. Before Interim Safe Storage work could start at the DR Reactor, standard practice required an ecological review of the site. That's when Gano almost stepped

in the evidence that indicated the bats were still calling the tunnel home. Further research of the bats' roost found this tunnel to be a maternity colony site, an exclusive domain of female bats and their young.

The State of Washington lists the Small-Footed Myotis, a member of the Little Brown Batgenus, as a priority species. Listing animals in this category

Continued on page 6b

lets the state call attention to a species and encourages voluntary protection of the animals' habitat before legally mandated protection, such as the Endangered Species Act, is invoked.

"DOE is committed to being a good environmental steward at Hanford — and, in this case, it means protecting the habitat of these bats," said Dana Ward of DOE's Natural Resource team. "It's an unexpected bonus that in carrying

out this role we may avoid the cost of decommissioning the tunnels."

At six to nine grams, the bats are smaller than field mice. That's not to say, however, they don't eat. A single little brown bat can catch 1,200 bugs an hour. A nursing bat eats more than her own body weight each night, up to 4,500 insects an hour.

Gano says that protecting the mater-

nity colony is important. Bats are exceptionally vulnerable to extinction, in part because of their slow reproductive rate and particularly because they congregate in large numbers. "These bats produce one offspring per year, so if you eliminate a breeding habitat, it takes the species much longer to recover," Gano said.

The existing entrance to the tunnel that the bats used before they migrated

in October is expected to be permanently sealed off in 2001. That gives Gano and others about a year to observe whether the bats are using their new entrance. However, Gano isn't concerned that the bats will be confused when they return to Hanford this April.

"Bats are highly intelligent animals with well-known sensory skills," Gano said. "It's just like in the movie: If you build it, they will come." ♦

Chlorine

(Continued from page 1.)

and maintenance costs.

"This effort is part of an overall right-sizing endeavor that looks at Hanford's changing needs and then tries to identify the best way to meet those needs," said Dave Kelly of the Fluor Daniel Hanford Infrastructure project. "Usually, that means replacing old plants that have gigantic capacities that are no longer needed with more efficient alternatives."

Recently, when the end of Hanford's production mission vastly reduced the number of occupied and operational buildings in the 300 Area, 2,400-volt pumps in the 382 Facility were replaced by 480-volt pumps with variable speed drives. Pumping low water flows through these older, oversized pumps was costly and sometimes caused pressure fluctuations that interrupted water delivery in the area.

Another project is under way that will tie together the 200 East and 200 West water filter plants, allowing the eventual shutdown of the 200 East filter plant. This project will further improve Hanford's interface with the environment by ending the trenching of filter backwash in 200 East. Other potential projects are being planned to replace outer-area chlorine cylinders and downsize river pumps.

Some specifics of the coming changes in site water services remain to be determined, said Mike Dallas, vice president of DynCorp Tri-Cities Services, the FDH Infrastructure subcontractor. However, the trend is clear. "We're working with FDH and the Department of Energy to bring services in line with commercial practices, and getting away from Hanford's traditional 'stand-alone' status. We'll continue to look for the optimal ways to operate within safe parameters." ♦



98120260-28

Steve Hexum of Fluor Daniel Hanford (kneeling, foreground) checks the connections on a chlorine gas cylinder prior to shipment while Steve Halter, also with FDH, provides safety oversight.

Tumbleweeds

(Continued from page 1.)

The Russian thistle, or tumbleweed, that breaks loose in the wind and comes to rest on your back fence is little more than a minor nuisance. On the Hanford Site, however, tumblin' tumbleweeds are more of a problem because some can spread low-level radioactive contamination.

Heightened attention to the issue of contaminated tumbleweeds was recently initiated by individual employees through the Employee Concerns programs of Fluor Daniel Hanford and the DOE Richland Operations Office. As a result of these safety concerns, DOE-RL completed an investigation entitled "The Control of the Spread of Radioactive Contamination Due to Biological Transport at the Hanford Site."

Even before the report was issued, the Project Hanford Management Contract team had already recognized a need for a more centralized program for the control of Russian thistle, other noxious weeds, animals and pests. The PHMC team has developed an integrated weed and pest control proposal — and, once it's in place, administrative and overhead costs incurred by various contractors last year will be reduced. More dollars can then be directed to pest and weed control work.

The Russian thistle has deep roots

that can reach contaminated groundwater and then spread low-level radioactivity when the top of the plant is blown away. Eleven reports of tumbleweeds contributing to contamination spread were made on site in 1995, and that number increased to 20 reports in the first six months of 1998.

"There might be 50 tumbleweeds, and we'll find one with some radioactivity," said Greg Perkins, FDH director of Radiation Protection. In a stepped-up control effort, more than 11,000 acres of land are now being monitored. The contaminated weeds are bagged, crushed and taken to low-level burial grounds.

The DOE report on the issue calls for better prevention measures to keep the thistle from growing, especially in the 200 Area where there is underground contamination. Herbicides are used, but it's not as simple as doing more spraying. "You can't go out and blanket an area with spray," Perkins said. "Certain plants have to be protected and you can't arbitrarily kill those off."

Another challenge in developing the integrated program is to clarify roles and responsibilities, so a tumbling thistle doesn't become someone else's problem as it blows from place to place. ♦



In December of 1995, Brant Vondruska of Lockheed Martin Services (then Boeing) Photography was nearly hidden by a pile of tumbleweeds that came to rest outside the photo lab in Hanford's 300 Area. That year, there were 11 reports of tumbleweeds that contributed to the spread of contamination, while there were 20 such reports in the first six months of 1998. The Project Hanford Management Contract team has prepared an integrated weed and pest control proposal to deal with the biological transport of contamination on site.

Security depends on you

Report
Security Concerns:
373-3800

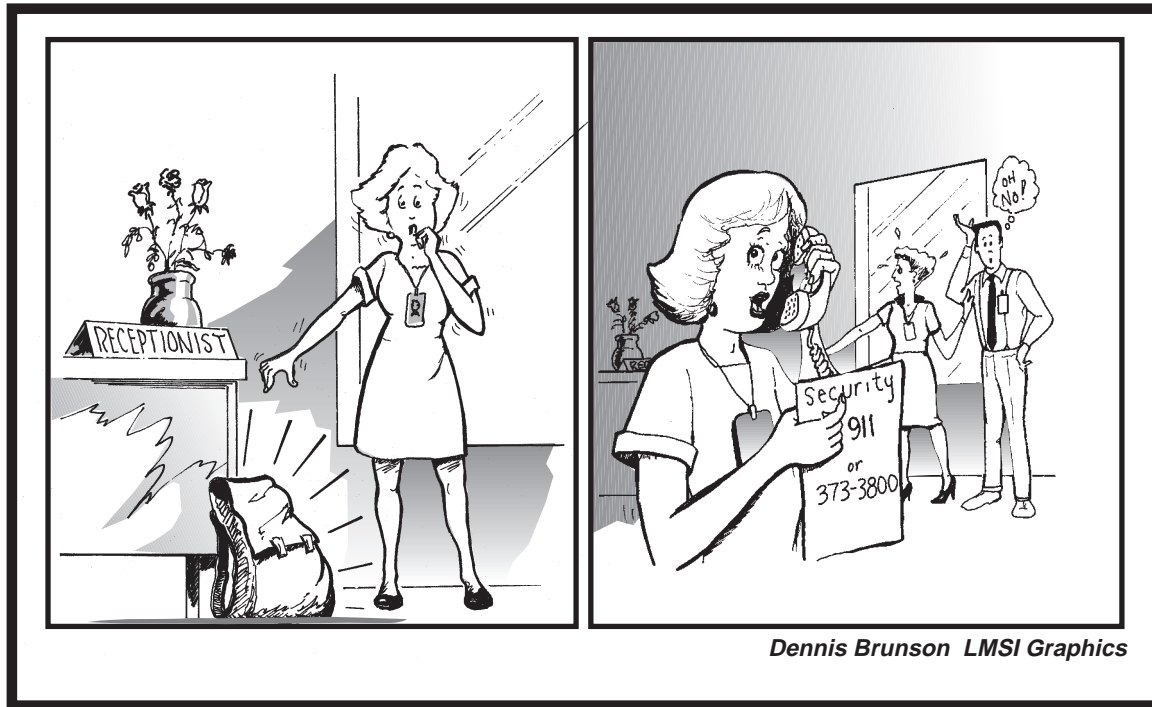
One million safe hours for LMSI

“Well, there’s nothing like bringing in the new year right,” wrote Ted Holmes, manager of Safety, Security and Facilities for Lockheed Martin Services in a message to LMSI employees.

On Jan. 1, the Hanford enterprise company reached a million safe hours worked without a lost-workday accident. LMSI employs more than 500 people including crafts workers and subcontractor personnel.

It was about a year ago that LMSI reached the same safety milestone, then experienced a lost-time accident that restarted the clock from zero.

“Congratulations and thanks to all of you for practicing safe work habits,” Holmes said. “Let’s keep up the good work for 1999!”



Dennis Brunson LMSI Graphics

Tag that bag!

Chet Braswell, BWP

In an effort to help reduce the number of reports of suspicious or unidentified items, Safeguards and Security has luggage tags available to identify the owners of hand-carried items such as briefcases, toolboxes and handbags. These tags have a security message on one side and space to write your name and phone number on the other.

Individuals who routinely bring hand-carried items to work are encouraged to obtain these identification tags. Considering the use of explosives by terrorists and criminals, unidentified hand-carried items are often viewed as potential hazards. The use of these tags will help building occupants, security personnel and law enforcement officers identify the item’s owner and avoid an unnecessary response by an explosive detection and removal team.

To order these tags, contact PHMC Security Education via e-mail at ^SECURITY EDUCATION PHMC, or call 376-1820. You may also pick them up at the Central Badging Office in the 300 Area (3790 building) or at DOE Visitor Control in room 150 of the Federal Building.

B R A V O**On their way to a million**

FFTF employees have passed 600 days without suffering a lost workday because of a work-related injury or illness. This equals nearly 900,000 safe working hours. FFTF employees are aiming to reach one million safe hours in late February or early March.

Weightlifter achieves second world title

Congratulations to Bechtel Hanford, Inc. electrician Bennie Dooley who recently retained his world bench press title at the World Association of Bench Press and Dead Lifters competition in Portland, Ore. Dooley lifted 501 pounds in the Masters 275-pound class, breaking his previous world lift record of 479 pounds. This is Dooley's second consecutive world title. He also has won the national title three years in a row. ♦

**V A N P O O L S**

Vanpool ads are run for two weeks. Ads must be resubmitted to run in subsequent issues of the *Hanford Reach*. The deadline for submissions is Thursday, 10 days prior to publication.

B&W Protec, Inc. Security Education reminds employees to wear their badges. Vanpool and carpool drivers are responsible for ensuring riders are badged. If a passenger forgets his or her badge, Patrol must be informed at the barricades. For more information, look on the Hanford Web in the Projects and Activities section, Safeguards And Security (PHMC) at <http://www.rl.gov:1050/sas/pg1v3.htm>.

RICHLAND

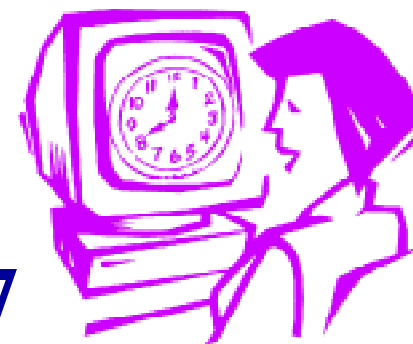
Wanted: vanpool or carpool from Richland (Horn Rapids area) to PFP on 8x9, 6:30-4 shift. Call **Angelia** at 373-2572. 01/11

Need rider for 200E on 7-4:30 shift. Picks up at Hanford bus lot and drops off at 2750-E and MO-277 (last stop). Rates under \$40. Contact **Dave Hedengren**, 373-5094. 1/11

8x9 vanpool needs one rider from Richland to 200E. Picks up at Williams and Thayer, Al's Auto, and Hanford bus lot. Stops at 200E Tank Farms, 2025-E and 2727-E. Very reasonable rates for 10-passenger vanpool. Call **Curt Hedger** at 373-7935 or **Bob Kuhlman** at 373-4175. Come join the fun. 01/04 ♦

Office 97

SR2 update available



Microsoft has published a major update to MS Office 97 called Service Release 2 or SR2. This update fixes the "bugs" (for the most part, you will not notice a difference) and makes your Office software fully Year 2000 (Y2K) compliant.

This update is now available via Software Distribution under the "Desktop Applications" category. If MS Office Professional already is installed on your workstation, update the software by selecting "SR2 Office PRO Update" from Desktop Applications in Software Distribution. When performing the update, you *must* close all Office 97 applications first (Word, PowerPoint, Excel, Access and Outlook).

If you have *MS Office Standard* (Standard does not include the Access database), you will need to install "*MS Office Professional*" from the Desktop Applications category (again, close all Office applications first).

Some users have installed the metered version of Access (using Key Access). *MS Office Professional* is now the Hanford Site standard Office suite. Updating to Professional will convert your metered Access into standard Access without the need to use Key Access.

You can perform this update at any time by Feb. 28. If you have any questions, contact Susan Schmaltz of LMSI via e-mail or at 372-0748.



HERO CHRISTMAS PARTY A SUCCESS — As chairperson of the HERO Christmas party that was held at the Shilo on Dec. 19, I would like to thank the committee members and ticket sellers for the time and effort they volunteered to make the party a great success! Two hundred of the Hanford family gathered to share dinner, dancing and 18 door prizes. More than 350 pounds of food was collected for donation to the food bank. The HERO board wishes you and yours a healthy, prosperous and Happy New Year!
Nancie L. Simon, HERO President

1999 ENTERTAINMENT BOOKS NOW AVAILABLE! - Save up to 50 percent on dining, travel, shopping, theater, sports and more! \$35 per book. Send checks made payable to "HERO" to Marvene McChesney at T4-61."

MOVIE TICKETS — \$4 each with a limit of six per family. Send checks made payable to "HERO" to Michelle Brown-Palmore (A7-51), Linda Sheehan (T4-40), Nancy Zeuge (X3-56), or Leann Messinger (S3-28).

DISCOUNTED WHITE PASS SKI TICKETS! — Discounted tickets available for all Saturdays and Sundays in January and February. Additional dates, including Fridays off, will be established with prior notification of 24 or more skiers per trip. Contact Bill Duerr at S6-16 or 373-4331.

DISCOUNTED BLUEWOOD LIFT TICKETS! — All-day lift ticket prices for adults are \$23, students \$19 (must present valid ASB card), child/senior \$17 (children

grades 1-8/seniors 65+), preschool children free. All prices reflect a \$3 saving. Send checks made payable to "HERO" to Leann Messinger at S3-28.

SKI MT. BACHELOR — Feb. 19-22. Only \$367 pp/do. Children age 7-12 \$135 each when sharing a room with two paying adults. Trip includes round-trip motor coach from Richland, three nights in the Riverhouse Motor Inn, three-day lift tickets, shuttle service to the mountain, and a wine/cheese social. Send e-mail to Sheila Kirk.

MAZATLAN, MEXICO — Seven days starting April 19. \$688 pp/do; 3rd and 4th person (same room) rates available. Spend seven enjoyable days and nights in Mazatlan. Explore beautiful beaches unspoiled, empty and brimming with private coves covered with shells. Great fishing, golfing, sightseeing. Country's largest shrimp fleet. Dine on shrimp and disco until 2 a.m. Vacation includes round-trip air from Seattle, seven nights accommodations at the first-rate Playa Mazatlan Hotel, round-trip transfers, complimentary cocktail party, and more. Deposit of \$100 is due now to reserve your spot with balance due 60 days before departure. Send e-mail to Jackie Campbell or call at 373-1220.

EDMONTON, CANADA — May 28-31. \$380/adult, \$236/child. Send e-mail to Sheila Kirk.

LAS VEGAS, REDUCED PRICE! — June 4-7. \$410 pp/do. Join us in the city that never sleeps! Four new casinos to explore in addition to the wonders al-

ready in Las Vegas. Package includes round-trip air from Pasco, hotel transfers, and three nights lodging at the new Mandalay Bay hotel. Rate depends on when trip is booked. Deposit of \$50 pp required. Send e-mail to Leann Messinger.

ITALIAN HOLIDAY — Oct. 8-20. 12 days, \$2,255. We have upgraded to first class hotels; airfare may be less if we use a different air carrier. Includes roundtrip Seattle/Rome (for Pasco/Seattle/Rome add \$118). Tour includes Rome, Pompeii, Isle of Capri, Sorrento, Assisi, Venice, Padua, Montecatini, Florence, Tuscan Hills and return to Rome. Breakfast daily and five three-course dinners. Trafalgar Tours, one of the world's best guide services, will be our host. Additional days in Rome \$90/pp or take a train to Paris and

fly home. \$150 deposit due at sign up. Balance (can be put on credit card) due 60 days before departure. Get your passport now! Send e-mail to Nancie Simon.

SOUTHERN CARIBBEAN CRUISE — Seven days in October, \$1,177. Send e-mail to Marvene McChesney.

JAMAICA AIR/LAND TOUR — Mid-November. Rate and dates determined in January/February. \$150 deposit pp required to reserve space. Deposit will be fully refunded if the determined rate or dates are unsatisfactory. Send e-mail to Sandy Graham.

As details develop, more information will appear in the *Reach* and on the Hanford Intranet Web site.

Tingstad & Rumbel in concert at Battelle Auditorium

The Battelle Staff Association is pleased to announce the 2nd Annual Tri-City concert appearance of Narada recording artists Tingstad & Rumbel at the Battelle Auditorium in Richland on Saturday, Jan. 30 at 8 p.m. Over the course of their 13-year partnership, Tingstad & Rumbel have emerged as two of adult contemporary music's most imaginative and respected instrumentalists.

General tickets are available at The Book Place, Richland (946-6046) or ABCDs Multi-Media, Kennewick (735-6457). Battelle staff members can obtain advance tickets from the ETB receptionist. Tickets prices are \$9 in advance or \$10 at the door.